



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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January 29, 2001

Ref: 8EPR-EP

Jan Sensibaugh, Director
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Re: Clean Water Act Section 303(d)
Total Maximum Daily Load (TMDL)
Waterbody List

Dear Ms. Sensibaugh:

Thank you for the submittal of Montana's year 2000 list of water quality-limited segments requiring Total Maximum Daily Loads under Section 303(d) of the Clean Water Act. Montana's submittal was dated December 1, 2000. EPA received the list on December 7, 2000. EPA has conducted a complete review of this waterbody list and its supporting documentation and information. Based on this review, EPA has determined that Montana's year 2000 list meets the requirements of Section 303(d) of the Clean Water Act ("CWA" or "Act") and EPA's implementing regulations. Therefore, by this order, EPA hereby APPROVES Montana's year 2000 Section 303(d) list. Please see the enclosure for a description of the statutory and regulatory requirements and a summary of EPA's review of Montana's compliance with each requirement.

EPA has been in contact with the United States Fish and Wildlife Service (FWS) regarding whether and, if so, how EPA's approval of Montana's year 2000 Section 303(d) list may affect the continued existence of any endangered or threatened species listed under the Endangered Species Act (ESA) or the designated critical habitat of any such species. EPA has not determined that today's approval may have such an effect. Therefore, consistent with the terms of a consent decree in the lawsuit of Friends of the Wild Swan, et al., v. U.S. Environmental Protection Agency, et al., Civil Action No. CV99-87-M-LBE, United States District Court for the District of Montana, Missoula Division, EPA has decided to request informal consultation with the FWS concerning today's approval. EPA's approval of this list is subject to the outcome of consultation with the FWS. We are optimistic that consultation can be concluded expeditiously soon after this approval.



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As your submittal letter recognized, Montana was not obligated to submit a Section 303(d) list for the year 2000. EPA amended its Section 303(d) implementing regulations in March 2000 to eliminate the regulatory requirement for state submission of a Section 303(d) list for the year 2000 unless expressly required by a court order, consent decree, or settlement agreement dated prior to January 1, 2000. (See 65 FR 17166, March 31, 2000.) However, states may elect to submit lists for the year 2000, as Montana has done.

As with prior Section 303(d) list approvals, today's approval relates only to the State's identification of waters in need of TMDLs or TMDTLs (total maximum daily thermal loads) under Section 303(d)(1)(A) and 303(d)(1)(B) of the CWA. It does not apply to any TMDL or TMDTL that the State has established under Section 303(d)(1)(C) and 303(d)(1)(D) of the CWA. Nor does it constitute any decision by EPA regarding the State's pace of developing TMDLs or TMDTLs.

EPA's approval of Montana's Section 303(d) list extends to all waterbodies on the list with the exception of any waters that are within Indian Country, as defined in 18 U.S.C. Section 1151. EPA is taking no action to approve or disapprove the State's list with respect to those tribal waters at this time. EPA or eligible Indian Tribes, as appropriate, will retain responsibilities under Section 303(d) for those waters. EPA recognizes that the State has removed from its year 2000 list certain waters identified on prior list submissions because the State now believes that these waters are within Indian Country. EPA notes that because EPA's approvals of Montana's lists from 1996 and 1998 did not extend to waters within Indian Country, the EPA-approved lists for those years did not include waters within Indian Country.

The public participation process sponsored by the Montana Department of Environmental Quality ("DEQ") relating to this list included 18 public meetings, various public notices and website postings announcing that a draft of the State's list was available for public review, and a mailing to 2700 individuals or entities asking for comments on the draft list and additional data or information on waters. DEQ provided an extended period, from April 20, 2000 to September 5, 2000, for receiving input from the public on the draft list. Further, DEQ has relied on input from a citizen TMDL Workgroup to aid in development of the year 2000 list. We commend the State for its thorough public participation process.

In years past, the State has taken a broad approach to considering waters for its 303(d) list, having included waters with minimal or simply anecdotal evidence of impairment. To fulfill new requirements in State law, DEQ re-examined the original basis including waters on its past Section 303(d) lists, while striving to maintain compliance with the CWA and EPA's regulations. As a result of that re-examination, the State found that many waters lacked "sufficient credible data" within the meaning of that term in the new State law for the State to conclude that they were water quality-limited segments (WQLSs). Therefore, the State did not include these waters on its year 2000 list. Waters that were on prior lists but not on the year 2000 §303(d) list have been given high priority for monitoring and reassessment to determine if they should be listed in the future.

Recent guidance from EPA Headquarters confirmed that current EPA regulations allow

removing waters from section 303(d) lists for good cause but recommended that EPA Regions pay particular attention to situations in which de-listing is not based on new data or information showing that water quality standards have been attained. (See April 28, 2000 memorandum from Robert H. Wayland III; Director, Office of Wetlands, Oceans and Watersheds entitled "EPA Review of 2000 Section 303(d) lists.") In its review of the list, EPA paid special attention to the State's decision not to include approximately 496 waters that were previously included in Montana's 1998 Section 303(d) list.

EPA takes the position that neither the Clean Water Act nor EPA's regulations require the State to establish TMDLs for waters not on the most recent EPA-approved Section 303(d) list. However, in view of the recent orders in the case of Friends of the Wild Swan, et al. v. U.S. Environmental Protection Agency, et al., CV 97-35-M-DWM, U.S. District Court for the District of Montana, Missoula Division, which require TMDLs for all waters on Montana's 1996 Section 303(d) list, EPA is committed to working with Montana in developing TMDLs for all waters on Montana's 1996 Section 303(d) list, regardless of whether those waters are on the year 2000 list as approved today.

We would like to compliment the hard work and professionalism of your staff in the careful evaluation of data and the development of the Section 303(d) list for the year 2000. We recognize this has been a tremendous undertaking. If you have questions or comments regarding this approval action, please feel free to give me, or Bruce Zander (303-312-6846) of my staff, a call.

Sincerely,

Max H. Dodson
Assistant Regional Administrator
Office of Ecosystems Protection and Remediation

Enclosure

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Review of Montana's Year 2000 Section 303(d) Waterbody List

*Attachment to January 29, 2001 letter from Max H. Dodson, Assistant Regional Administrator,
Office of Ecosystems Protection and Remediation, US EPA, Region VIII to Jan Sensibaugh, Director
Montana Department of Environmental Quality*

Date of Transmittal Letter from State: December 1, 2000
Date of Receipt by EPA: December 7, 2000

This attachment is organized in the following manner:

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- B. Statutory and Regulatory Background
- C. Description of Year 2000 List Submittal
- D. Description of Data and Information the State Utilized
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 - 2) Modeling and dilution calculations - MPDES permits
 - 3) Reports of water quality problems
 - 4) Section 319 assessments
- E. Description of Assessment Methodology
- F. Monitoring of Waters Removed from the 303(d) List
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- I. Identification of Pollutants
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A. Purpose of this Document

The purpose of this document is to describe the rationale for EPA's approval of Montana's Year 2000 Section 303(d) waterbody list. EPA reviewed the entire package submitted by the State, including the methodology used by the State in developing the §303(d) list and the State's description of the data and information it considered. EPA's review and approval of Montana's §303(d) list is based on EPA's analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters,

pollutants, priorities, and targeted waters as required by the CWA and EPA's regulations. EPA considered applicable federal laws, regulations and guidance in its approval decision.

B. Statutory and Regulatory Background

Section 303(d) of the CWA and 40 C.F.R. Section 130.7 as currently in effect establish requirements for state lists of waterbodies in need of TMDLs. EPA relied on these provisions in reviewing and approving Montana's year 2000 list. EPA also considered its guidance concerning §303(d), which is included in various memoranda cited below in Section K. The following is a summary of some requirements for Section 303(d) lists.

Identification of Water Quality Limited Segments for Inclusion on Section 303(d) List. Section 303(d)(1) of the Act directs each state to identify those waters within its jurisdiction for which effluent limitations required by CWA Sections 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard. These waters are known as water quality-limited segments, or WQLSs. The §303(d) listing requirement applies to waters threatened or impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of §303(d).

At times, §303(d) lists are informally referred to as lists of impaired and threatened waters or as lists of waters that do not meet standards. However, it is more accurate to describe waters on Section 303(d) lists as waters for which standards are not or are not expected to be implemented through the technology-based limits required by Sections 301(b)(1)(A) and (B) of the CWA. Further, EPA's TMDL regulations provide that states do not need to list waters (even though they may be impaired) where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the sections 301((b), 306, 307, or other sections of the Act, (2) more stringent effluent limitations required by State or local authority, and (3) other pollution control requirements required by State, local, or federal authority. (See 40 C.F.R. Section 130.7(b)(1).)

Prioritization of Waters for TMDL Development. Section 303(d)(1)(A) of the CWA and 40 C.F.R. Section 130.7(b)(4) require that each state shall establish a priority ranking for the waters it identifies under §303(d), "taking into account the severity of the pollution and the uses to be made of such waters." In addition, 40 C.F.R. Section 130.7(b)(4) requires that state lists "identify the pollutants causing or expected to cause violations of the applicable water quality standards" and "specifically include the identification of waters targeted for TMDL development in the next two years." EPA's review of Montana's prioritization is discussed in more detail in Section H, below.

Consideration of Existing and Readily Available Data and Information. In developing §303(d) lists, each state is required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, existing and readily available data and information about the following categories of waters: (1) waters identified by the state in its most recent CWA §305(b) report as "partially meeting" or "not meeting" designated uses or

“threatened,” (2) waters for which dilution calculations or predictive modeling indicate applicable standards will not be attained; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any §319 nonpoint assessment submitted to EPA. (See 40 C.F.R. Section 130.7(b)(5).) In addition to these minimum categories, states should consider any other relevant data and information that are existing and readily available. EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality-related data and information that may be existing and readily available.¹ Please see Section D, below, for further discussion of how the State used existing and readily available data and information in compiling its list.

Assessment Criteria. Although states are required to evaluate all existing and readily available water quality-related data and information in compiling their §303(d) lists, they may decide to rely or not rely on particular data or information in determining whether to list specific waters. Each state must provide documentation to EPA to support the state's determination to list or not to list its waters. This documentation must be submitted to EPA together with the list and must include a description of the listing methodology, a description of the data and information used to develop the list, a rationale for any decision to not use any existing and readily available data and information, and any other reasonable information requested by EPA.

Applicable Water Quality Standards. For purposes of identifying waters for the §303(d) list, the terms “water quality standard applicable to such waters” and “applicable water quality standards” refer to those water quality standards established under Section 303 of the Act. On April 27, 2000, EPA promulgated a rule under which the “applicable standard” for Clean Water Act purposes depends on when the relevant state or tribe promulgated that standard. Standards that states or tribes have promulgated before May 30, 2000 are effective upon promulgation by the states or tribes. Standards that states or tribes promulgate on or after May 30, 2000 become effective only upon EPA approval. (See 65 Fed. Reg. 24641.)

C. Description of Year 2000 List Submittal

The year 2000 Section 303(d) waterbody list that Montana has submitted to EPA consists of the following portions of the enclosures to the December 1, 2000 letter from Mark A. Simonich, Director of the Montana DEQ, to EPA Region VIII:

. Waterbodies and corresponding pollutants that make up the State's Section 303(d) list (See waters/pollutants identified in Part A, Chapter 2 on pages 2-4 through 2-287 and waters/pollutants identified in Part B, Table 4 and further described in Appendix B)

. Prioritization of waterbodies for TMDL development (See Part B, Chapter II, Table 2)

¹See Guidance for Water Quality-Based Decisions: The TMDL Process, EPA Office of Water, 1991, Appendix C ("EPA's 1991 Guidance").

. Identification of waters targeted for TMDL development over the next biennium (See Part B, Chapter III, Table 3 for the list of which watersheds will have TMDLs completed over the next biennium (2000-2002) as well as following years; this schedule covers waters on the State's 1996 §303(d) waterbody list)

Today's approval action extends only to the items listed immediately above, *i.e.*, the waterbodies and corresponding pollutants listed above, the prioritization of waterbodies for TMDL development, and the identification of waters targeted for TMDLs over the 2000-2002 biennium.

In addition to the §303(d) list described above, Montana also submitted the following to EPA, which EPA is neither approving nor disapproving in today's action:

- an introduction and glossary of terms (Chapter 1; Part A)
- an itemization of the de-listed waters (Chapter 3, Part A),
- a record of public participation (Chapter 4; Part A),
- a description of the database and methodology the State used in its assessment (Appendix A, Part A),
- a schedule for reassessing waterbodies (Appendix B, Part A),
- a prioritization and scheduling of waters for TMDL completion to meet the court-ordered deadline of May 5, 2007 (Chapter III, Part B),
- a scoring sheet used for ranking waterbodies (Appendix A, Part B), and
- a table summarizing the TMDLs that EPA had approved prior to the State's submission of the State's year 2000 list (Appendix C, Part B).

Montana's year 2000 Section 303(d) list includes approximately 458 waters, which, in the aggregate, need approximately 1,100 TMDLs. (Some waterbodies have been listed for more than one pollutant.) The year 2000 list adds approximately 39 waters that were not on the 1998 list and removes approximately 534 waters that were on the 1998 list. Of the approximately 534 de-listed waters, approximately

- 462 were de-listed for lack of sufficient "credible data",²
- 38 were de-listed for lack of State jurisdiction,³
- 32 were de-listed for data showing that they are fully supporting their designated uses,⁴ and
- 2 were de-listed for nonpoint-source TMDLs having been completed and approved.⁵

²See Part A, pages 3-9 through 3-25, especially Table 3-E.

³See Part A, Table 3-C, pages 3-2 through 3-6.

⁴See Part A, Table 3-D, pages 3-7 and 3-8.

⁵See Part A, page 3-1.

The numbers of waters above are approximate because the State has re-segmented its waters between the 1998 303(d) list and the year 2000 list. The total number of waterbodies addressed in 2000 is greater than the total number of waterbodies in year 1998. For example, where there was one segment in 1998, there may be two segments for purpose of the year 2000 list. This splitting of segments was done, in part, to distinguish portions of the same segments that are in different ecoregions or are distinctly different in a physical or biological sense.

D. Description of Data and Information the State Utilized

In preparing its year 2000 list, Montana relied on information from its year 2000 Section 305(b) report, its 1998 Section 303(d) list, the assessments it had performed under its CWA Section 319 non-point source program, information in the MPDES permits due for renewal during the 2000 - 2002 listing cycle, and other data and information obtained through an extensive process to solicit information from state, federal and citizen sources. In its search for existing and readily available data and information, the State mailed over 2,700 letters to local water groups, federal, state and local agencies, private organizations, and citizens asking for water quality information. In addition, the State conducted 18 public meetings in which it asked for information, and it searched its extensive computerized water quality data bases.⁶

EPA regulations require that four categories of information and data, at a minimum, be considered by states when §303(d) lists are developed. (See 40 C.F.R. Part 130.7(b)(5).) EPA has reviewed Montana's description of the data and information it considered for identifying waters on the §303(d) list and concludes that the State properly assembled and evaluated all existing and readily available data and information, including data and information in the four minimum categories as described below:

1) Waters identified by the State in its most recent section 305(b) report as "partially meeting" or "not meeting" designated uses or as "threatened" (§130.7(b)(5)(i)).

Montana has begun using a unified approach to its waterbody assessments in its Clean Water Act Section 303(d), 305(b), and 319 programs. There is true consistency between these programs since the same assessment methodology and results may be used by all three. (The only exception is where the State has not updated its assessment as a result of public comment on its 303(d) list and it has not updated its 305(b) or 319 reports to reflect that change.) In this unified assessment, all waters reported as "partially meeting" or "not meeting" designated uses or as "threatened" are on the 303(d) list, are reported in the Section 305(b) report and are included in the State's 319 assessment.

2) Waters for which dilution calculations or predictive models indicate non-attainment of applicable water quality standards (§130.7(b)(5)(ii)).

⁶A description of available data identification is provided in Part A, Appendix A, pages A6-A7, of the State's submission.

Section 303(d) lists include not only those waters that are known not to be attaining standards, but also those waters for which dilution calculations and/or predictive modeling demonstrate that standards may not be attained (even after the application of technology-based effluent limits).

In the course of issuing MPDES permits, DEQ routinely calculates whether technology-based effluent limitations required by CWA Sections 301(b)(1)(A) and 301(b)(1)(B) are stringent enough to implement applicable water quality standards in the receiving waters. These calculations are done by dilution calculations and/or predictive modeling.

Where DEQ's calculations show that technology-based effluent limitations would not be sufficient for this purpose, the DEQ imposes water quality-based effluent limitations ("WQBELs") as appropriate. In many instances, these WQBELs are based on TMDLs developed by the State and subsequently submitted to and approved by EPA as TMDLs under Section 303(d)(1)(C) of the CWA.⁷

DEQ makes these calculations not only when permits are initially issued but also when they are renewed. Accordingly, from the present until June 30, 2002, DEQ expects to make these calculations for the permits and waterbodies that are listed in Appendix B, Part B of its December 1st submission.

Not all the waterbodies included in Appendix B, Part B may actually need TMDLs. In the event that dilution calculations and/or predictive modeling demonstrate that the waterbodies would meet applicable standards with only technology-based effluent limitations in the relevant permits, then no TMDLs will be needed for those waterbodies, and they will be removed from subsequent lists as appropriate. However, it is likely that most of the waterbodies included in Appendix B, Part B will need updated TMDLs in support of the permits that are to be renewed in this biennium, because many of these permits already have been found to need WQBELs and because factors such as changed background conditions, more stringent water quality standards, or changes in effluent flows will require updates of TMDL calculations. Therefore, it is reasonable for the State to have listed all waterbodies with permit renewals for the 2000-2002 biennium on its year 2000 §303(d) list.

EPA concludes that Montana properly considered waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards in development of its 2000 §303(d) waterbody list.

3) Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or academic institutions (§130.7(b)(5)(iii)).

⁷See Part B, Appendix C of Montana's submission for a summary of the past TMDL approvals.

As noted above, the State solicited and considered data and information from local, state, or federal agencies, members of the public, and academic institutions while preparing the year 2000 §303(d) list.⁸ The State utilized mailing, public meetings, and the Internet to make solicitation for data and information.

4) Waters identified by the State as impaired or threatened in a nonpoint assessment submitted to EPA under section 319 of the CWA or in any updates of the assessment (§130.7(b)(5)(iv)).

Section 319 of the CWA required states to develop a nonpoint source assessment report as well as a nonpoint source management plan. Montana completed its management plan by 1988 and its assessment of nonpoint sources by 1992. During the mid-1990's, Montana fully integrated its assessment under the 319, 305(b), and 303(d) programs. The assessments reported under each of these programs stem from the same assessment process to assure consistency from one program to the next.

In its year 2000 draft nonpoint source management plan, the State has included the same assessment results as found in the draft year 2000 Section 303(d) waterbody list, which are the same found in its year 2000 Section 305(b) report. (See Nonpoint Source Management Plan Water Quality Planning using a Watershed Approach, Volume 1: Goals, Objectives Montana DEQ; May 2000 Draft, and Framework and Nonpoint Source Management Plan Water Quality Planning using a Watershed Approach; Volume 2: Watershed Planning and Coordination Profiles; Montana DEQ; April 2000 Draft.)

EPA believes that consolidation of 319 and 303(d) assessments is a reasonable approach to assuring consistency between the two programs.

E. Description of Assessment Methodology

In preparation for its year 2000 section 303(d) list, the State revised its listing methodology in fulfillment of State law, which provides, in relevant part:

“By October 1, 1999, and in consultation with the statewide TMDL advisory group . . . , the department shall develop and maintain a data management system that can be used to assess the validity and reliability of the data used in the listing and priority ranking process. . . .” See MCA Section 75-5-702(5).

The State developed such an assessment methodology (*i.e.*, a “data management system”) in consultation with a statewide TMDL advisory group established under MCA Section 75-5-704 and with consideration of comments made by the public through an open review process. This year 2000 listing methodology contains a set of criteria, based largely on EPA guidance addressing

⁸See, for example, Part A, Appendix A, pages 6-7 of Montana’s submission.

State development of the Section 305(b) report, for the State to apply in deciding whether to use certain existing and readily available data and information as a basis for including waters on the list (e.g., what constitutes "sufficient credible" data and information as defined in Montana law). These criteria were developed in accordance with the following provisions from Montana law, which require the Montana DEQ to make its listing decisions based on existing and readily available data and information:

By October 1, 1999, and in consultation with the statewide TMDL advisory group, the department shall use the data management system developed and maintained pursuant to subsection (5) to revise the list and to remove any water body that lacks sufficient credible data to support its listing. . . . [See MCA Section 75-5-702(6).]

Currently available data" is defined as "data that is readily available to the department at the time a decision is made, including information supporting its previous lists of water bodies that are threatened or impaired. [See MCA Section 75-5-103(4).]

After close review, EPA concludes that the listing methodology developed and employed by DEQ in developing its year 2000 Section 303(d) list is consistent with Section 303(d) of the CWA, EPA's regulations, and EPA's guidance and is a reasonable approach to determine waters that should be included on the State's §303(d) list.

In evaluating Montana's listing methodology, EPA compared the State's methodology with its own guidance on assessing waters. EPA has long taken the position that the methods states use to determine whether waters meet standards for purposes of §303(d) lists are the same as the methods to make this same determination for purposes of §305(b) reports. See, for example, the following statement in a 1992 EPA guidance document:

Q: How does EPA define attainment of water quality standards?

The methods used to determine non-attainment of standards for water quality reporting under 305(b) should also be used for identifying waters pursuant to 303(d). These decision criteria and methodologies are provided in Appendix B - "Making Use-Support Determinations" of Guidelines for Preparation of the 1992 State Water Quality Assessments (305(b) Reports). This guidance document addresses the use of monitoring data and evaluative information to decide whether standards are being met and provides specific criteria for what constitutes an exceedance.⁹

⁹This statement comes from the an attachment to the August 13, 1992 memorandum from Geoffrey H. Grubbs to Water Quality Branch Chiefs, Regions I-X and TMDL Coordinators, Regions I-X. It is the answer to the second question in the "Questions and Answers For the EPA/State Workshops Held Winter 1991-2."

Montana's listing methodology for its year 2000 Section 303(d) list followed this approach by substantially relying on EPA's most recent Section 305(b) assessment guidance as a model. In particular, Montana generally followed EPA's most recent 305(b) assessment guidance,¹⁰ which provides for evaluating the level of rigor in qualitative and quantitative data, determining which data could be excluded from assessment procedure, which thresholds could be used to determine waterbody impairment conditions, and how to organize and report results.

Montana's listing methodology is described in Appendix A, Part A of its year 2000 Section 303(d) submittal. There are significant similarities between EPA's Section 305(b) guidance and Montana's methodology. For example, the tables in EPA's 1997 guidance concerning the rigor of biological, habitat, toxicological and physical/chemical data (Tables 3-1, 3-2, 3-3, 3-4) use many of the same factors as used in the State's tables for biology, chemistry/toxicity, and habitat/physical evaluation (Tables 1-6 in Appendix A, Part A). The factors included in both EPA's guidance and in the State's methodology include such things as temporal and spatial coverage of the data, the age of the data, the quality assurance protocols used to collect the data, and precision associated with the data. Likewise, the numeric thresholds used by the State to determine whether a waterbody was impaired are very similar to the thresholds recommended by EPA in its 1997 guidance. For example, the use impairment thresholds as found in the State's submittal at Tables 9 and 10 in Appendix A, Part A are very similar to the thresholds recommended by EPA in its 1997 guidance (Section 3-2 of EPA's 1997 guidance).

Because the State followed EPA's Section 305(b) assessment guidance in structuring its methodology for developing its 303(d) list, EPA finds the State's methodology reasonable.

EPA has approved Montana's 2000 list, recognizing that States have discretion to determine the manner in which they will use particular existing and readily available data and information.¹¹ Further, EPA's 1997 Section 305(b) assessment guidance allows states to exclude data not adequate for use determinations from their assessments. (See pages 3-6 in EPA's 305(b) assessment guidance.) According to this guidance, states may elect to exclude data that lacks rigor. EPA's guidance mentions several reasons why data may lack sufficient rigor, such as low precision or sensitivity in the data type, a limited number of samples, limited visual observations,

¹⁰"Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement," September 1997, EPA-841-B-97-002B. Unless otherwise indicated, any reference to EPA's "Section 305(b) assessment guidance," "1997 guidance," "1997 Section 305(b) assessment guidance" will mean this document.

¹¹In promulgating the Section 303(d) regulations, EPA recognized that states would have some degree of discretion in identifying waters. See 57 Fed. Reg. at 33046 (July 24, 1992) ("EPA agrees that the States should retain a certain amount of flexibility in developing their Section 303(d) list[s], but at the same time States should be prepared to demonstrate to EPA that all existing and readily available data and information relevant to identifying water quality-limited waters are used to develop section 303(d) lists.")

age of data, lack of quality assurance in the field or lab. (See discussion in Part 3.2 of EPA's 1997 Section 305(b) assessment guidance.) Montana has elected to use this approach in its year 2000 assessment methodology for both its Section 303(d) list and Section 305(b) report by evaluating data for its sufficiency and credibility. In its previous waterbody lists, Montana decided to take a conservative approach to listing, including waters based on a broad range of information (including non-quantitative, anecdotal information).¹² For the 2000 list, Montana revised its listing methodology to include evaluation of data and information using an approach in EPA's §305(b) assessment guidance. This resulted in a list that relied on data and information that met a certain level of credibility.

The term "sufficient credible data" is important to Montana's determination. Under Montana law, as amended in 1997, that term is defined as follows:

"Sufficient credible data" is defined as chemical, physical, or biological monitoring data, alone or in combination with narrative information, that supports a finding as to whether a water body is achieving compliance with applicable water quality standards. [See MCA Section 75-5-103(30)]

According to EPA regulations, States must supply a rationale for any decision to not use any existing and readily available data and information. (See 40 C.F.R. Part 130.7(b)(6)(iii).) For Montana, this rationale is basically the test of sufficient credibility. This test of sufficient credibility was patterned after EPA's 1997 Section 305(b) assessment guidance. In assessing whether data met the threshold for being "sufficiently credible" under Montana state law, DEQ considered all data that it had identified as existing and readily available from the searches described above. In evaluating the sufficiency of the data, DEQ ranked the data using factors included in EPA's assessment guidance for the purpose of evaluating the rigor of data. (See EPA's 1997 Section 305(b) assessment guidance.) The assemblage of data and information for any given waterbody was ranked for its sufficiency according to the procedure identified in Figure 2, Appendix A, of Part A of the State's submittal. Again, this constitutes the State's rationale for using or not using any particular data or information in its listing decision.

The factors used to evaluate data and information for sufficiency included temporal and spatial coverage of the data, age of the data, quality assurance protocols used to collect the data, and precision associated with the data. For example, Montana took into account age of data as one of the factors it considered in deciding whether to list waters. In some cases, historical data by itself was not used as a basis for listing, such as locations where land use practices have changed since the data was collected. In other cases, historical data was used as a basis for listing, such as situations where the state concluded that the data had been collected using good quality control and there was no indication that conditions had changed since the data was collected. Thus, no single factor was used to list or remove previously-listed waters. Instead,

¹²Although the 1997 definition of "sufficiently credible data" was in effect as of the time Montana submitted its 1998 Section 303(d) list EPA, Montana did not apply this definition to its 1998 list, because the statutory deadline of October 1, 1999 deadline under MCA Section 75-5-702(5) and (6) for compiling and instituting a data management system had not yet occurred.

these factors were considered together using the State's methodology for scoring data and information, described in more detail in the State's list submission. These factors are consistent with EPA's guidance on evaluating data and information for waterbody assessments.

This evaluation of data sufficiency was performed on a waterbody-by-waterbody basis. The State's documented results of the waterbody-by-waterbody evaluation by including for each waterbody file a description of the data and information available for the waterbody, the sources of the data and information, and results of the data ranking.

An example of data and information that did not meet the definition of sufficient credible data is found in the State's assessment of Reimel Creek (identification number MT76H002_020 in the Columbia River subbasin 17010205). The information available for this waterbody includes fishery inventory reports and surveys from 1991, 1993, and 1996 as well as an environmental assessment document from 1991. Habitat data and biological data were available for this waterbody, but there was no chemistry data or observational data. The fisheries reports, although described in the State's assessment as "good," provided information that was qualitative in nature, limited in the number of fish assemblages evaluated, limited in spatial coverage, and lacking in detailed taxonomic resolution. The habitat information lacked a reference condition upon which to put the information in context and was limited in spatial coverage and, except for the stream morphological measures, was too general. Further, the personnel performing the sampling had limited training. The data and information were ranked with a collective score of 5 (chemistry data scored 0, biology data scored 3, and habitat data scored 2) which fell short of the threshold of ≥ 6 to constitute sufficient credible data when only two of the three sets of data are available.¹³ Although Reimel Creek is not on the 303(d) list, it is on the State's reassessment monitoring list.

An example of data and information that met the definition of sufficient credible data is found in the State's assessment of Doolittle Creek (identification number MT41D004_220 in the Upper Missouri River subbasin 10020004). In contrast with Reimel Creek, this waterbody had more information and better quality information to describe its condition. The type of information available for this Doolittle Creek included fisheries reports, a water flow report, a landscape analysis, a water resource report, and water quality data files. These documents included habitat, biological, and chemical information. Although there was inadequate data to determine if there was impairment of the drinking water use or the recreational use, there was sufficient credible data to determine the status of aquatic life use. The biological data was collected by a qualified professional and it had a moderate level of precision and sensitivity. The strength in the database for Doolittle Creek was in the habitat measures. The habitat data was highly quantitative, spatially broad, collected by a highly experienced professional, and was most likely representative of current-day conditions. The chemistry did have some weaknesses (*e.g.*, the spatial and temporal coverage was not very thorough), but it was still considered with the other data and information.

¹³ It should be noted that Montana's assessment methodology does not require all three types of data and information (*i.e.*, biological, chemical, physical). Rather, a determination that a waterbody is impaired can be based solely on one of the data types or on any combination of the three. See, in particular, the discussion under "Overwhelming Evidence" starting on page A-11 in Appendix A of Part A of the State's submittal.

The overall score for Doolittle Creek was 6 (chemistry data scored 1, biology data scored 2, and habitat data scored 3). This equals the threshold score of 6 to constitute sufficiently credible data and information. Because the assemblage of chemical, physical, and biological data was considered sufficient, and Doolittle Creek was kept on the State's 303(d) list.

EPA acknowledges that states may re-evaluate the waters on their 303(d) lists. In a 1997 memorandum, EPA stated that “. . . Regions and states should keep in mind that waterbodies may be added or subtracted over time as new lists are developed.”¹⁴ Accordingly, in an August 27, 1997 memorandum, EPA identified several conditions that allow states to remove previously-listed waters from §303(d) lists. In addition to de-listing a waterbody when a TMDL has been established for it, states may delist a waterbody when:

- 1) the waterbody is meeting all applicable water quality standards or is expected to meet these standards in a reasonable time frame (*e.g.*, two years) as a result of implementation of required pollutant controls or
- 2) if, upon re-examination, the original basis for listing is determined to be inaccurate.¹⁵

Further, the existing EPA regulations require states, at the request of the Regional Administrator, to demonstrate good cause for not including waterbodies on their lists. Good cause includes, but is not limited to, more recent and accurate data, more sophisticated water quality modeling, flaws in the original analysis that led to the waterbody being listed, or changes in conditions, *e.g.*, new control equipment, or elimination of discharges. (See 40 C.F.R. 130.7(b)(6)(iv).)

Montana's basis for de-listing is its re-examination of its prior listing decisions. In approving the year 2000 list, EPA does not find that Montana's earlier lists were improperly approved or that they somehow falsely indicated that waterbodies were not supporting their uses when in fact they were. Instead, EPA finds that Montana has acted reasonably and consistently with EPA's current TMDL regulations in choosing a different methodology for evaluating use attainment. Both the former methodology and the present methodology are properly within the State's discretion under current EPA regulations.

Montana has de-listed a substantial number of previously-listed waters. As described above, some waters were de-listed because EPA has approved TMDLs for them, some because the

¹⁴ Page 4, August 8, 1997 memorandum from Robert Perciasepe, Assistant Administrator for Water, US EPA, regarding “New Policies for Establishing and Implementing TMDLs.”

¹⁵ August 27, 1997 memorandum from Robert H. Wayland III, Director, Office Wetlands, Oceans, and Watershed, Office of Water, EPA Headquarters, to Water Division Directors, Regions I - X, and Directors, Great Water Body Programs, and Water Quality Branch chiefs, Regions I - X, regarding "National Clarifying Guidance For 2000 State and Territory Section 303(d) Listing Decisions."

State has determined that they are within Tribal, not Montana, jurisdiction, and some because they have been found in full support of their beneficial uses. Most de-listed waters were excluded as a result of applying the new assessment methodology. Under Montana's new methodology, unless there is "sufficient credible data" to support a finding that any required use of a waterbody is impaired, then the waterbody is not on the current §303(d) list.¹⁶

Each waterbody Montana has de-listed for lack of "sufficient credible data" is named in Table 3-E on pages 3-10 through 3-25 of the State's submission. For each waterbody, Table 3-E indicates whether each designated use is "fully supported" or whether there is, under the State's new methodology, "insufficient credible data" to support making a determination on use attainment. More detailed records on each watershed are available for public viewing at the office of the DEQ in Helena, Montana and on the Internet, at "<http://nris.state.mt.us/wis/environet>." In addition, DEQ has provided EPA with a compact computer disk (CD) including the waterbody-by-waterbody records. This CD also is available for review at DEQ's offices.

In its review of the State's year 2000 waterbody list, EPA took special care to review the methodology and resultant de-listings from Montana's list. In its preamble to the March 31, 2000 Federal Register notice, EPA stated that:

"... EPA intends to carefully review any proposed removal of a waterbody from a section 303(d) list to ensure there is information specific to the waterbody to support the removal. 65 FR 4921. In particular, where a waterbody was previously listed based on certain data or information, and the State removes the waterbody without developing or obtaining any new information, EPA will carefully evaluate the State's reevaluation of the available information, and would not approve such removals unless the State's submission describes in detail why it is appropriate under the current regulations to remove each affected waterbody. EPA has the authority to disapprove the list if EPA identifies existing and readily available information that was existing and readily available at the time the State submitted the list and that data shows that a waterbody does not attain water quality standards." 65 FR 17168.

Having reviewed Montana's submission and supporting documentation, EPA has concluded that Montana has acted reasonably and within the discretion that current EPA regulations allow in de-listing waterbodies.

Finally, it is important to emphasize that a U.S. District Court has required TMDLs to be established no later than May 5, 2007 for all waters on Montana's 1996 Section 303(d) list, unless these waters are shown to be meeting standards.¹⁷ Compliance with all applicable court orders will

¹⁶See page 3-9, Chapter 3, Part A of the State's submission.

¹⁷See June 21, 2000, September 21, 2000, and November 7, 2000 orders in Friends of the Wild Swan, et al. v. U.S. Environmental Protection Agency, et al., No. CV-97-35-M-DWM, District of Montana.

be paramount.

F. Monitoring of Waters Removed from the 303(d) List

Montana law requires DEQ to monitor and reassess all “de-listed” waters, which will more accurately identify waters that do not meet their designated uses and result in TMDLs for all waters that need them. As provided in MCA Section 75-5-702(6):

By October 1, 1999, and in consultation with the statewide TMDL advisory group, the department shall use the data management system developed and maintained pursuant to subsection (5) to revise the list and to remove any water body that lacks sufficient credible data to support its listing. If the department removes a water body because there is a lack of sufficient credible data to support its listing, the department shall monitor and assess that water body during the next field season or as soon as possible thereafter to determine whether it is a threatened water body or an impaired water body. (emphasis added)

In other words, those waterbodies delisted based on a lack of “sufficient credible data” are to be monitored. If “sufficient credible data” indicates they should be listed, then they will be listed. The State has already begun the task of collecting sufficient credible data on certain waters that have been de-listed. In Appendix B, Part A the State identified which specific waters will be monitored during the 2000-2001 field seasons.

G. Public Participation Process and Public Comments

The public participation process sponsored by DEQ relating to the year 2000 §303(d) list included 18 public meetings, various public notices and website postings announcing that a draft of the State’s list was available for public review, and a mailing to 2700 individuals or entities asking for comments on the draft list and additional data or information on waters. DEQ provided an extended period, from April 20, 2000 to September 5, 2000, for receiving input from the public on the draft list. Even with the prolonged comment period, many of the comments were received after the September 5 deadline. The State nonetheless addressed these comments in its final 303(d) list submittal.

DEQ also relied on input from a citizen TMDL Workgroup to aid in development of the year 2000 list. The Workgroup is made up of 14 representatives from various interest groups.

In response to comments on the draft year 2000 list, DEQ made changes to its waterbody list. Although one waterbody was taken off the list based on information provided to it, DEQ also added 27 waters to the list based on data and information supplied from the public to it during the comment period. (To see a summary of all the changes made by the State based on comments it received, note the discussion on page 4-3 of Chapter 4 in Part A of the State’s submittal.)

An example of a waterbody that was placed back on the list after public comment is Fish Creek in the Columbia Basin (identification number MT76M002_060 in subbasin 17010204). The State considered the information supplied to it regarding Fish Creek and concluded that there was sufficient data to determine that the Creek was impaired. The type of information used by the State in its evaluation of Fish Creek included data and reports generated by DEQ, fisheries data and reports from the Montana Department of Fish, Wildlife, and Parks, data and a Section 7 Endangered Species Act consultation report from the US Forest Service, chemistry data from the United States Geological Survey, and bull trout status reports. In its documentation on the Fish Creek assessment, the State identified the factors it used to decide that the data and information were sufficiently credible. Further, the State included in its documentation what biological, physical, chemical, and habitat information it used to determine that Fish Creek was impaired for aquatic life use.

Examples of waters that were petitioned for re-listing but still kept off the year 2000 list are Piper Creek and Pattengail Creek. In the case of Piper Creek (identification number MT76K003_061 in the Columbia River subbasin 17010211), the State used data and reports from various sources including US Fish and Wildlife Service, the Montana Bull Trout Scientific Group, the US Forest Service, DEQ, and the Montana Department of Fish, Wildlife, and Parks. After evaluating the data and information for Piper Creek, the State concluded that there was sufficient credible data to conclude that Piper Creek was fully supporting its aquatic life, drinking water, recreation, agriculture, and industry uses. Keeping a waterbody off the 303(d) list once new data shows it is supporting all of its uses is reasonable and consistent with EPA guidance.

For Pattengail Creek (identification number MT41D003_210 in the Upper Missouri River subbasin 10020004) the State evaluated data and information from several sources and concluded that there was insufficient credible data to conclude Pattengail Creek was impaired. For its evaluation of data pertaining to aquatic life use, DEQ concluded the data, in part, had limited spatial and temporal coverage, was 12 years or older, lacked precision and sensitivity, and included visual observations that were anecdotal in nature. Excluding data and information that lack adequate rigor from waterbody assessments is reasonable and consistent with EPA guidance.

Some commenters disagreed with Montana's decision to de-list waters that had been on lists from prior years. They cited to several provisions of EPA's regulations in support of a claim that EPA was required to disapprove Montana's removal of certain waterbodies from its list.

These commenters claimed that Montana failed to "assemble and evaluate all existing and readily-available water quality-related data and information," including data and information in certain enumerated categories. See 40 C.F.R. 130.7(b)(5). However, the commenters appear to believe that because the state did not list every waterbody for which it had some such information, regardless of how questionable or conclusive the information was, the shortened list should not be approved. This position indicates a misunderstanding of the regulatory requirement. The EPA's regulations require states to "assemble and evaluate" relevant data and information that is existing and readily available, but they do not require states to use all such information as a basis for listing waters. This is evidenced by 40 C.F.R. 130.7(b)(6)(iii), which requires states to provide a rationale for any decision not to use data and information described in 40 C.F.R. 130.7(b)(5). Were states required to use all such data and information, there would be no requirement for any

rationale for not using it. See *Friends of the Wild Swan v. Browner*, CV 97-35-M-DWM at 16-17 (Nov. 5, 1999) (“Although states are required to ‘assemble and evaluate’ all existing and readily available data and information in developing lists of WQLSs, a state can discount or reject certain data and information as long as it provides a reasonable basis for doing so.”)

Some commenters also claimed that Montana failed to provide “good cause” for removing certain previously-listed waters, as required by 40 C.F.R. 130.7(b)(6)(iv). EPA disagrees. As described in EPA guidance, the EPA has taken a close look at Montana’s reasons for removing waterbodies. See Memorandum from Robert H. Wayland III, Director, Office of Wetlands, Oceans, and Watersheds, to Water Division Directors, “EPA Review of 2000 Section 303(d) Lists,” April 28, 2000. This guidance document asks EPA Regions to pay particular attention to removals of previously-listed waterbodies where such removals are not based on new data or information showing water quality standards are met. Commenters mistake this request for a statement by EPA that such de-listings are not permitted. The guidance does not say this. Rather, it simply suggests that a state’s de-listing should be closely reviewed to ensure the state had good cause for its actions. The regulations describe several situations that may constitute good cause, but they expressly recognize that there may be other situations that are also good cause. See 40 C.F.R. 130.7(b)(6)(iv)(“Good cause includes, but is not limited to, ...”).

As indicated above, Montana assembled and evaluated the relevant existing and readily available data and information for each waterbody and determined, on a waterbody-specific basis, whether such data and information demonstrated that water quality standards were being met. In some cases, Montana concluded that its previous determination about a particular waterbody should be revised, based on a reevaluation of the data and information. Neither the CWA, EPA regulations, or EPA guidance prohibits such a conclusion. The regulations do not mandate a particular listing methodology or listing criteria that all states must follow. Instead, they describe the process states must go through (*i.e.*, consider available data and information, describe their listing methodology, provide a rationale for not using certain data or information, and provide good cause upon request for not including waterbodies). EPA takes the position that states may choose their own listing methods, as long as the regulatory criteria are met. Moreover, once a state has chosen a particular methodology, it is not bound to follow that methodology in each subsequent listing cycle, but instead may further refine or revise its methodology as it deems appropriate, as long as the regulatory criteria are met.¹⁸

Montana’s listing methodology did meet the regulatory criteria, and followed a process consistent with the regulations. The state has demonstrated good cause for not including previously-listed waterbodies by analyzing relevant data and information for such waters and

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One comment, received approximately six weeks after the close of the public comment period, pointed to a 1998 statement by Montana that waterbodies on the Section 303(d) list could be de-listed either if a TMDL were developed and approved or if the waterbody were found, upon reassessment, to support its uses fully. However, the methodology that Montana used in 1998 did not commit it to use the same methodology for future years. As explained above, both the 1998 and 2000 interpretations of when to de-list waters are properly within the scope of discretion that current EPA regulations allow states to exercise in compiling their Section 303(d) lists.

deciding based on such analysis whether applicable water quality standards are being met. A more detailed discussion of the state's methodology for making listing decisions can be found elsewhere in [the decision document for this decision as well as the state's submission itself.??]

EPA also disagrees with commenters who claimed that because EPA approved the State's prior lists, it could not approve a subsequent list that relied upon a different methodology and removed a number of previously-listed waterbodies. Commenters suggested that doing so would mean that the prior lists were inaccurate. This is not the case. As stated above, nothing in the Act or EPA's regulations prevents a state from revising or refining its listing methodology from cycle to cycle, as long as the regulatory criteria are met. In addition, the regulations allow states discretion to choose a reasonable listing methodology. To require EPA to disapprove the 2000 list simply because we approved a prior list using a different methodology would result in locking the state into a particular methodology without allowing for any revision. Therefore, EPA's approval of the 1998 and earlier Montana lists was reasonable and does not mean that approval of a subsequent list using a different methodology is arbitrary, as long as both lists were developed following the process described in the regulations and meeting regulatory criteria.

One commenter claimed that Montana's list was "arbitrary" because the state did not assess all its waterbodies. However, neither the Act nor any EPA regulation requires states to do so. Rather, states must assemble and evaluate existing and readily available data and information. There is no requirement to create new information to develop the list. *See Friends of the Wild Swan v. Browner, supra*, at 16 (Nov. 5, 1999).

H. Prioritization and Scheduling

As part of their lists, states must prioritize waters for TMDL development, taking into account the severity of the pollution and the uses to be made of such waters. (*See* Section 303(d)(1)(A) of the CWA and 40 C.F.R. Section 130.7(b)(4).) As long as states take these required factors into account, the CWA does not require States to prioritize their waters in any specified manner. States may use their discretion in establishing priorities for TMDLs.

The factors that Montana used in its prioritization are set out in MCA Section 75-5-702(7). EPA finds that these factors are acceptable for a state to apply in prioritizing the waters for TMDL development because, as described in more detail below, they include not only the factors that required by the CWA and EPA's TMDL regulation but also those recommended by EPA's guidance.

As mentioned above, the CWA and EPA's TMDL regulation require states to consider the severity of pollution and the uses for the listed waters. Montana's law requires DEQ to consider the uses to be made of listed waters. (See MCA Section 75-5-702(7)(a), requiring DEQ to consider "the beneficial uses established for a water body.") In addition, the following factors from Montana's law relate to the severity of pollution:

1. Impacts to human health and aquatic life (MCA 75-5-702(7)(c));
2. Character of pollutant (MCA 75-5-702(7)(e));
3. Severity and magnitude of water quality standard noncompliance (MCA 75-5-

702(7)(e));

4. Beneficial uses established (MCA 75-5-702(7)(a));
5. Size of the waterbody not attaining standards (MCA 75-5-702(7)(g)); and
6. Extent of natural factors over which humans have no control that are contributing to impairment (MCA 75-5-702(7)(b)).

Not only has Montana included the required factors (*i.e.*, severity of pollution and uses of waterbodies) in its prioritization, it has also included additional factors that EPA has recommended that states consider. These EPA-recommended factors include immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, state or national policies and priorities, court orders and decisions relating to water quality. (See 57 Fed. Reg. 33040, 33044-33045 (July 24, 1992), and EPA's 1991 Guidance, pages 13-14.) Montana has also included these recommended factors, as listed below:

1. Immediate programmatic needs - MCA 75-5-702(7)(h);
2. Vulnerability of particular waters as aquatic habitats - MCA 75-5-702(7)(f);
3. Recreational, economic, and aesthetic importance - MCA 75-5-702(7)(m);
4. Degree of public interest and support - MCA 75-5-702(7)(d);
5. State or national policies and priorities - MCA 75-5-702(7)(j); and
6. Court orders and decisions relating to water quality - MCA 75-5-702(7)(i).

Accordingly, EPA finds that the additional factors used by the State in its prioritization are consistent with EPA's guidance.

Montana outlined its prioritization process in Part B, Chapter I of its submission. Allowing for substantial public input, it developed scoring sheets for weighing the thirteen statutory factors mentioned above.

Montana assigned greatest weight or "3" to

- (c) the impacts to human and aquatic life;
- (e) the character of the pollutant and the severity and magnitude of water quality standard noncompliance; and
- (f) whether the water body is an important high-quality resource in an early stage of degradation;

Montana assigned a weight of "2" to

- (a) the beneficial uses established for a water body;
- (d) the degree of public interest and support;
- (g) the size of the water body not achieving standards;
- (h) immediate programmatic needs, such as waste load allocations for new permits or permit renewals and load allocations for new nonpoint sources;
- (k) the availability of technology and resources to correct the

problems;

- (l) whether actions or voluntary programs that are likely to correct the impairment of a particular water body are currently in place; and
- (m) the recreational, economic, and aesthetic importance of a particular water body.

Montana assigned a weight of “1” to

- (b) the extent that natural factors over which humans have no control are contributing to any impairment; and
- (j) state policies and priorities, including the protection and restoration of native fish when appropriate.

Montana did not use “(i) court orders and decisions relating to water quality” in its rankings, because court orders would prevail over any ranking process.¹⁹

EPA finds that this ranking system is reasonable and is within the allowable scope of discretion that states may exercise in prioritizing their TMDLs, consistent with the CWA, EPA’s regulations, and the recommendations in EPA’s guidance.

Montana’s ranking resulted in scoring 81 waterbodies as high priority and 78 as moderate, with the remaining waters receiving a low priority. The greatest numbers of high and moderate priority waters are in the Columbia and Upper Missouri Basin.

In addition to prioritizing waters for TMDL development as required by 40 C.F.R. Section 130.7(b)(4), Montana has developed a schedule for developing TMDLs, which EPA adopted on November 1, 2000, in accordance with the June 21, 2000 and September 21, 2000 orders in Friends of the Wild Swan, et al. v. U.S. Environmental Protection Agency, et al., CV 97-35-M-DWM, U.S. District of Montana, Missoula Division. This schedule sets deadlines by which TMDLs for WQLSs in each Montana watershed will be completed.²⁰ As required by the court orders, this schedule is based on the waters on Montana’s 1996 list, not its 2000 list. This schedule is included as part of the State’s year 2000 list submittal package, but it is not one of the items upon which EPA is formally taking action as part of its approval of the year 2000 list.

The November 1, 2000 schedule identifies what TMDLs will be done over the next 7 years (through May 5, 2007). This schedule meets the 40 C.F.R. Part 130.7(b)(4) provision requiring states to identify waters that will be targeted for TMDL development over the next two years (2000-2002 biennium).

¹⁹ See pp. 10-14, Part B, Chapter I, for the State’s explanation of how it assigned weights to the various statutory ranking factors.

²⁰ See page 40 of Part B, Chapter III, of the State’s submission for the schedules for TMDLs in the Upper Missouri Region, the Lower Missouri Region, the Yellowstone Region, and the Columbia Region.

I. Identifying Pollutants (130.7(b)(4))

EPA's TMDL regulation requires §303(d) lists to identify the pollutants that are causing or expected to cause violations of applicable water quality standards. (See 40 C.F.R. Section 130.7(b)(4).)

Montana identified the pollutants (when known) that are causing or expected to cause exceedances of the applicable water quality standards, including those pollutants that have no corresponding numeric criteria in the State standards (*e.g.*, sediment.) The pollutants are identified in the columns entitled "Probable Causes of Impairment" in the waterbody descriptions in Chapter 2 of Part A of Montana's submission. Montana identified these pollutants based on categories specified in EPA's 1997 Section 305(b) guidance.

J. Endangered Species Act Issues

Regarding consultation under Section 7 of the Endangered Species Act ("ESA"), EPA representatives have been in contact with the Denver Regional Office and the Montana Field Office of the U.S. Fish and Wildlife Service (FWS) since July, 2000 regarding potential ESA concerns with regard to Montana's year 2000 Section 303(d) list. Today, the EPA has made a written request to the FWS to initiate informal consultation.

It has been suggested that all waters that contain or have contained species that have been listed as threatened or endangered under the Endangered Species Act ("T&E species") should be included on Montana's Section 303(d) list. Montana did not decide to list waters solely due to the presence or absence of T&E species. EPA agrees with Montana's decision. As mentioned above, Section 303(d)(1)(A) of the CWA requires only that states identify those waters for which limitations in Sections 301(b)(1)(A) and (b)(1)(B) of the CWA are not stringent enough to implement any applicable water quality standards. In and of itself, the presence or absence of T&E species gives no indication of whether such effluent limits are or are not sufficient to implement these standards. Further, the cause for impairment of any particular waterbody must be evaluated in light of the requirement in Section 303(d)(1)(A).

The cause for the demise or extirpation of any given T&E species is frequently linked to factors that go beyond those factors used for listing waters on a Section 303(d) list. For example, competition between an aquatic T&E species and other more abundant aquatic species is sometimes cited as a reason for the decline of the T&E species. Competition between these species would not constitute a reason for listing a water on a §303(d) list. On the other hand, poor water quality is often cited as a cause for the decline of T&E species and is also a reason for listing waters on a §303(d) list. Where the State of Montana had information on factors such as water quality that relate to the §303(d) listing process, it included those waters on its list. (Many of these waters have T&E species in them.)

Factors that contribute to the demise or extirpation of a given T&E species can be found in determinations of the U.S. Fish and Wildlife Service. For example, the numbers of threatened bull trout have declined in the Columbia River basin because of habitat isolation, loss of migratory corridors, poor water quality, and the introduction of non-native species. (See 63 Fed. Reg. at

31947; June 10, 1998 Federal Register Notice from US Fish and Wildlife Service regarding the determination of Threatened Status for the Klamath River and Columbia River Distinct Population Segments of Bull Trout.) Further, factors affecting bull trout populations include competition and hybridization with other species, fragmentation and isolation of bull trout from habitat changes caused by human activities, and extirpations due to naturally occurring events such as droughts and floods. (See 63 Fed. Reg. at 31668.) In its §303(d) list, Montana identified waterbodies where factors such as habitat, flow, and water quality contribute to impairment of aquatic life, including bull trout and other T&E species. The State did not list a waterbody where there was no sufficient credible information showing that aquatic life uses (including T&E species uses) were impaired for the specific waterbody, including impairments caused by habitat, flow, and water quality. Factors such as hybridization, species competition, and loss of migratory corridors are not seen as a basis to list waters on a Clean Water Act §303(d) waterbody list.

One commenter, whose comment was received a day after the public comment period closed, cited three bull trout watersheds that, in the commenter's opinion, should have been included on the State's year 2000 list. These were portions of Fish Creek (HUC 17010204 MT 76M002_60), Trout Creek (HUC MT 76M002_50), and Petty Creek (HUC 17010204 MT 76M002_90). Montana DEQ evaluated the information provided to it and decided to include each of these three streams on the final year 2000 list.

K. Documents Used in Review of Montana's §303(d) Waterbody Submittal

EPA used the following documents directly or indirectly as a basis for its review of the State's §303(d) waterbody list. This list is not meant to be an exhaustive list of all records reviewed, but it includes the primary documents upon which EPA relied.

40 C.F.R. Part 130 - *Water Quality Planning and Management*.

40 C.F.R. Part 131 - *Water Quality Standards*.

December 28, 1978 Federal Register Notice, *Total Maximum Daily Loads Under Clean Water Act / Notice*, 43 Fed. Reg. 60662.

January 11, 1985 Federal Register Notice, *40 C.F.R. Parts 35 and 130 / Water Quality Planning and Management / Final Rule*, 50 Fed. Reg. 1774.

April 1991, "Guidance for Water Quality-Based Decisions: The TMDL Process," EPA 440/4-91-001.

July 24, 1992 Federal Register Notice, *40 C.F.R. Parts 122, 123, and 130 / Surface Water Toxics Control Program and Water Quality Planning and Management Program / Final Rule*, 57 Fed. Reg. 33040.

August 13, 1992 memorandum from Geoffrey Grubbs, Director, Assessment and Watershed Protection Division, Office of Water, EPA Headquarters, to EPA Water Quality Branch Chiefs, Regions I - X and TMDL Coordinators, Regions I - X, regarding "Supplemental Guidance on Section 303(d) Implementation."

October 30, 1992 memorandum from Geoffrey Grubbs, Director, Assessment and Watershed Protection Division, Office of Water, EPA Headquarters, to Water Quality Branch Chiefs, Regions I - X, regarding "Approval of 303(d) Lists, Promulgation Schedules/Procedures, Public Participation."

May 1993 Guidelines for the 1994 State Water Quality Assessments (305(b) Reports), US EPA Office of Water, EPA-841-B-93-004.

November 26, 1993 memorandum from Geoffrey Grubbs, Director, Assessment and Watershed Protection Division, Office of Water, US EPA, to Water Quality Branch Chiefs, US EPA Regions I - X, and TMDL Coordinators, US EPA Regions I - X, regarding "Guidance for 1994 Section 303(d) Lists."

June 1994 Montana 305(b) Report, Water Quality Division, Montana Department of Health and Environmental Sciences, with cover sheet entitled "Montana Water Quality 1994."

August 9, 1996 memorandum from Robert Perciasepe, Assistant Administrator for Water, US EPA, to Regional Administrators, US EPA Regions I-X, and Division Directors Responsible for TMDL Programs, US EPA Regions I-X, regarding "EPA Action on 1996 Lists, Priority Rankings and TMDL Targeting Plans Submitted by States Under Section 303(d) of the Clean Water Act."

April 15, 1997 letter from Steve Kelly, Director, Friends of the Wild Swan, to Christian J. Levine, Montana Department of Environmental Quality, regarding Swan Lake water quality issues.

May 23, 1997 memorandum from Geoffrey H. Grubbs, Director, Assessment and Watershed Protection Division, US EPA, to FACA Workgroup on Section 303(d) Listing Criteria, regarding "Nonpoint Sources and Section 303(d) Listing Requirements."

July 22 and 23, 1997 agenda and presentation notes from TMDL workshop in Denver, Colorado, for EPA Region VIII States and Tribes.

August 8, 1997 memorandum from Robert Perciasepe, Assistant Administrator, Office of Water, US EPA, to US EPA Regional Administrators and US EPA Regional Water Division Directors, regarding "New Policies for Establishing and Implementing TMDLs."

August 27, 1997 memorandum from Robert H. Wayland III, Director, Office Wetlands, Oceans, and Watershed, Office of Water, EPA Headquarters, to Water Division Directors, Regions I - X, and Directors, Great Water Body Programs, and Water Quality Branch chiefs, Regions I - X, regarding "National Clarifying Guidance For 2000 State and Territory Section 303(d) Listing Decisions."

September, 1997 guidance from Office of Water, Headquarters, US EPA regarding Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement, EPA-841-B-97-002B

September 12, 1997 letter from Carol L. Campbell, Director, Ecosystems Protection Program, Office of Ecosystems Protection and Remediation, US EPA Region VIII, to Mark Simonich, Director, Montana Department of Environmental Quality, regarding "Transmittal of TMDL Guidance."

December 17, 1997 notes from Bruce Zander, US EPA Region VIII, from Montana TMDL State Advisory Meeting (Helena, MT) including notes regarding Section 303(d) waterbody list development approaches used in other states as described by Don Essig (Idaho) and Sarah Johnson (Colorado).

January 27, 1998 presentation notes from Bruce Zander, US EPA, Region VIII from the Region VIII 305(b) Coordinators' Meeting entitled "Relationship Between Section 303(d) & Section 305(b)."

February 4, 1998 letter from Max H. Dodson, Assistant Regional Administrator, Office of Ecosystems Protection and Remediation, US EPA, Region VIII to Region VIII Water Quality Directors (including the Director of the Montana DEQ) regarding "303(d) Listing Requirements; Expiring Permits."

March 5, 1998 notes from Bruce Zander, US EPA Region VIII, from Montana TMDL State Advisory meeting (Helena, MT).

April 6, 1998 FAX memorandum from Stu Lehman, Planning, Prevention and Assistance Division, Montana Department of Environmental Quality, to Bruce Zander, US EPA Region VIII, regarding transmittal of undated correspondence from Jeff Juel, Ecology Center, on behalf of the parties, to Stuart Lehman, TMDL Coordinator, Department of Environmental Quality, regarding "Comments on 1998 Draft Montana List of Waterbodies in Need of Total Maximum Daily Load (TMDL) Development."

April 24, 1998 draft final report from the TMDL Federal Advisory Committee to US EPA entitled TMDL Federal Advisory Committee Report prepared with assistance from Ross & Associates Environmental Consulting, Ltd.

May 27, 1998 letter from Mark Simonich, Director, Montana Department of Environmental Quality, to Bill Yellowtail, Regional Administrator, US EPA Region VIII, regarding the "Transmittal of 1998 Montana Section 303(d) List."

June 10, 1998 letter from Gary Ingman, Chief, Monitoring & Data Management Bureau, Montana Department of Environmental Quality, to Bruce Zander, Ecosystems Protection Program, US EPA Region VIII, regarding MPDES pollutants of concern (Appendix A waters) and waterbodies removed or partially removed from the Montana 1996 Section 303(d) waterbody list.

June 23, 1998 letter from Max H. Dodson, Assistant Regional Administrator, Office of Ecosystems Protection and Remediation, US EPA Region VIII, to Mark Simonich, Director, Montana Department of Environmental Quality, regarding “Section 303(d) Total Maximum Daily Load (TMDL) Waterbody List.”

August 23, 1999 Federal Register Notice, *40 C.F.R. Part 130 / Proposed Revisions to the Water Quality Management and Planning Regulations / Proposed Rule*, 64 Fed. Reg. 46012.

April 27, 2000 Federal Register notice, *40 C.F.R. Part 131, EPA Review and Approval of State and Tribal Water Quality Standards Final Rule*, 65 Fed. Reg. 24641.

April 28, 2000 memorandum from Robert H. Wayland, III, Director, Office of Wetlands, Oceans, and Watersheds, US EPA, to Water Division Directors, US EPA Regions 1 - 10, entitled “EPA Review of 2000 Section 303(d) lists.”

May 2000 Draft report Nonpoint Source Management Plan Water Quality Planning using a Watershed Approach, Volume 1: Goals, Objectives; Montana DEQ

April 2000 Draft report Framework and Nonpoint Source Management Plan Water Quality Planning using a Watershed Approach; Volume 2: Watershed Planning and Coordination Profiles; Montana DEQ

December 1, 2000 letter from Mark A. Simonich, Director, Montana Department of Environmental Quality, to Bill Yellowtail, Regional Administrator, US EPA Region VIII, submitting Montana’s year 2000 Section 303(d) list.